

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (original) A device for corrected acquisition of the shadow of an ophthalmic lens (103) possessing one or more marks (PC), the device comprising:
 - receiver means (121, 114) for receiving said ophthalmic lens;
 - on either side of said receiver means, firstly lighting means (S) for illuminating the ophthalmic lens (103) installed on said receiver means, and secondly acquisition means (122, 125, C) for acquiring the shadow of said ophthalmic lens illuminated by the lighting means (S);
 - measurement means (S, 124, C) suitable for measuring the optical deflection power exerted by the ophthalmic lens on at least one light ray and for delivering a signal representative of said deflection power; and
 - an electronic and computer system including geometrical correction calculation instructions for deducing from said measured deflection power a corrected shape for at least a portion of the shadow of the ophthalmic lens as perceived by the acquisition means (122, 125, C).
2. (currently amended) A device according to ~~the preceding~~ claim 1, in which said corrected shape corresponds substantially to the shape that the shadow of said lens would present if said lens did not possess any deflection power.
3. (currently amended) A device according to ~~any preceding~~ claim 1, in which the measurement means (S, 124, C) are

suitable for measuring the deflection power exerted by the ophthalmic lens on at least three light rays passing through the lens at three points that are not in alignment.

4. (currently amended) A device according to ~~any preceding~~ claim 1, in which the measurement means are of the type proceeding by deflectometry.

5. (currently amended) A device according to ~~the preceding~~ claim 4, in which the deflectometry measurement means include at least one beam separator located between the lens receiver means (121, 114) and the acquisition means (122, 125, C).

6. (currently amended) A device according to ~~the preceding~~ claim 5, in which the deflectometry measurement means include said acquisition means (122, 125, C).

7. (currently amended) A device according to ~~any preceding~~ claim 1, in which the acquisition means include a projection screen (122) and an image acquisition system (C, 125) arranged to sense the image on said projection screen.

8. (currently amended) A device according to ~~any preceding~~ claim 1, in which said receiver means, said lighting means, said acquisition means, and said measurement means are held stationary relative to one another.

9. (currently amended) A device according to ~~any preceding~~ claim 1, having a single light path between said lighting means and said acquisition means.

10. (currently amended) A device according to ~~any one of claims 4 to 8~~ claim 4, in which said beam separator is a support (124) for at least one sign (124A, 124B) located

between said receiver means and said acquisition means, and in which the geometrical correction relationship calculated by said electronic and computer system is a function of the deformed shadow of the sign (124A, 124B) perceived by the acquisition means (122, 125, C).

11. (currently amended) A device according to ~~the preceding~~ claim 10, in which the sign support (124) is activatable and deactivatable.

12. (currently amended) A device according to ~~the preceding~~ claim 11, in which said sign support is a transparent active screen suitable for selectively displaying said opaque sign.

13. (currently amended) A device according to ~~the preceding~~ claim 12, in which said transparent screen is a liquid crystal screen.

14. (original) A device according to claim 9, in which said sign support has a regular array of repeated patterns.

15. (currently amended) A device according to ~~the preceding~~ claim 14, in which said sign support comprises a Hartmann matrix.

16. (currently amended) A device according to ~~any one of~~ ~~claims 9 to 14~~ claim 9, in which said sign support includes a geometrical figure having a maximum outside dimension lying in the range 2 mm to 10 mm.

17. (currently amended) A device according to ~~the preceding~~ claim 16, in which the geometrical covers an area lying in the range 3 mm² to 80 mm².

18. (currently amended) A device according to ~~either one of the two preceding claims~~ claim 16, in which the geometrical figure is of a shape different from a point or a cross, being suitable for being distinguished visually from a marking made on an ophthalmic lens.

19. (currently amended) A device according to ~~any one of claims 14 to 17~~ claim 14, in which the geometrical figure is a polygon, preferably a triangle.

20. (currently amended) A device according to ~~any one of claims 14 to 17~~ claim 14, in which the geometrical figure is a circle or an oval.

21. (currently amended) A device according to ~~any one of claims 1 to 3~~ claim 1, in which the measurement means are of the type operating by interferometry.

22. (currently amended) A device according to ~~any preceding claim 1~~, including means for placing a handling peg at a location that is determined by calculation on the front face of said ophthalmic lens.

23. (currently amended) A device according to ~~the preceding claim 22~~, in which said means for placing the handling peg are automatic means.

24. (original) A device according to claim 21, in which said means for placing the handling peg are manually controlled manipulator means.

25. (currently amended) A device according to ~~any preceding claim 1~~, including display means controlled by the electronic and computer system to display the at least partially

corrected shape of the shadow perceived by the acquisition means (122, 125, C).

26. (currently amended) A device according to ~~the preceding~~ claim 25, in which the electronic and computer system controls the display means for displaying the outline of the lens without applying the geometrical correction calculation thereof.

27. (currently amended) A device according to ~~any preceding~~ claim 1, in which the electronic and computer system includes image recognition instructions suitable for recognizing the shadow of a mark of the ophthalmic lens as perceived by the acquisition means (122, 125, C) and for applying said geometrical correction calculation thereto so as to deduce therefrom its corrected position in a known frame of reference corresponding substantially to the position that the shadow of said mark would present in said frame of reference in the absence of the lens possessing any deflection power.

28. (currently amended) A device according to ~~the preceding~~ claim 27, in which the image recognition instructions are suitable for recognizing the shadow of a center and/or axis mark of the ophthalmic lens as perceived by the acquisition means (122, 125, C).

29. (currently amended) A device according to ~~either one of the two preceding claims~~ claim 27, in which the image recognition instructions are suitable for recognizing the shadow of a reference mark for far vision or for near vision on the ophthalmic lens as perceived by the acquisition means (122, 125, C).

30. (original) A method of correcting acquisition of the shadow of an ophthalmic lens (103) presenting one or more marks (PC), the method comprising the following steps:

- illuminating the lens by a light beam;
- measuring the optical deflection power exerted by the ophthalmic lens on at least one incident light ray of said beam; and
- from the measured deflection power, deducing by calculation a corrected shape for at least a portion of the shadow of said ophthalmic lens as illuminated by said light beam.

31. (currently amended) A method according to ~~the preceding~~ claim 30, in which said corrected shape corresponds substantially to the shape that the shadow of said lens would present if said lens did not possess any deflection power.

32. (currently amended) A method according to ~~either one of the two preceding claims~~ claim 30, in which a measurement is made of the deflection power exerted by the ophthalmic lens on at least three distinct light rays passing through the lens at three points that are not in alignment.

33. (currently amended) A method according to ~~any one of the three preceding claims~~ claim 30, in which, in order to measure the deflection power of the ophthalmic lens, use is made of deflectometer means.

34. (currently amended) A method according to ~~the preceding~~ claim 33, in which, in order to measure the deflection power of the ophthalmic lens, the ophthalmic lens is illuminated and the shadow of the lens is sensed on acquisition means (122, 125, C), a beam separator being disposed between said acquisition means and the lens.

35. (currently amended) A method according to ~~any one of claims 30 to 32~~ claim 30, in which, in order to measure the deflection power of the ophthalmic lens, use is made of interferometer means.

36. (currently amended) A method according to ~~any one of claims 30 to 35~~ claim 30, in which, for an ophthalmic lens of the multifocal type, the geometrical correction is applied to at least one reference mark for near vision or for far vision of the multifocal ophthalmic lens in order to obtain a corrected position for said mark.

37. (currently amended) A method according to ~~any one of claims 30 to 36~~ claim 30, in which the geometrical correction is applied to the shadow of at least one center and/or axis mark of the ophthalmic lens in order to obtain a corrected position for said shadow.

38. (currently amended) A method according to ~~the preceding claim 37~~, in which, a virtual image (200) representative of the outline desired after the lens has been cut to shape is displayed on a display screen (105), and the position of said outline image is identified relative to the corrected position for the shadow of the centering mark on the lens.

39. (currently amended) A method according to ~~any one of claims 30 to 38~~ claim 30, including a step of displaying the corrected shape of the shadow on the lens on a display screen (105).

40. (currently amended) A method according to ~~the preceding claim 39~~, in which, during said display step, the shadow of the outline of the lens is displayed on a display screen (105)

without applying the geometrical correction calculation thereto.

41. (currently amended) A method according to ~~any one of claims 30 to 40~~ claim 30, including a step of recognizing the shadow of a mark on the ophthalmic lens and a step of applying the geometrical correction calculation to said mark shadow so as to deduce therefrom its corrected position in a known frame of reference, said corrected position corresponding substantially to the position that the shadow of said mark would present in said frame of reference in the absence of the lens having any deflection power.

42. (currently amended) A method according to ~~the preceding~~ claim 41, applied to automatically centering the lens, in which the recognized shadow is that of a center and/or axis mark of the ophthalmic lens.